



BY PEG TYRE

IT WASN'T THE GUNSHOT WOUND in the arm that bothered Jose Hernandez when he returned home to Cincinnati after serving in Iraq. It was the lock on the front door. He couldn't relax until he secured it twice, three times and sometimes more. Even then he was still on edge. "I kept thinking about the things I saw over there—shooting on the streets, dead bodies and the terror in people's eyes. I couldn't get it out of my mind," says Hernandez, who served in the Army's 101st Airborne Division. He stopped sleeping, withdrew from friends and dropped plans to go back to college. His girlfriend finally demanded that he get help. A Veterans Administration psychiatrist diagnosed Hernandez with posttraumatic stress disorder, or PTSD, a potentially crippling mental condition caused by extreme stress.

WOUNDED:
Drugs and therapy are helping Hernandez deal with PTSD

Hernandez says he was one of the lucky ones. With a combination of antianxiety medication and talk therapy, his symptoms have begun to fade. Many of the

170,000 men and women now returning from Iraq and Afghanistan may not be as fortunate. When they get home, tens of thousands of them will be grappling with psychological problems such as PTSD, anxiety, mood disorders and depression. Though scientists are learning just how trauma affects the brain—and how best to help patients heal—there are still many obstacles to getting the treatment to the people who need it most. For starters, no one knows how many soldiers will be affected or how serious their problems will become. Early in the war the Army surveyed 3,671 returning Iraq veterans and found that 17 percent of the soldiers were already suffering from depression, anxiety and symptoms of PTSD.

Experts say those numbers are likely to grow. A study of Vietnam veterans conducted in 1980 found that 30 percent suffered from an anxiety condition later dubbed PTSD. Experts say the protracted warfare in Iraq—with its intense urban street fighting, civilian combatants and terrorism—could drive PTSD rates even higher. National Guard members, who make up 40 percent of the fighting force, with less training and less cohesive units, may be more vulnerable to psychological injuries than regular soldiers. Last year 5,100 soldiers who fought in Iraq or Afghanistan sought treatment in VA clinics for PTSD. That figure is expected to triple.

PTSD, a specific diagnosis, is not the only psychological damage soldiers can sustain. And experts say that mental disorders can

Battling the Effects of War

Combat can wound the mind. New science helps vets from Iraq to cope.

make the already rugged transition from military to civilian life a harrowing one. Soldiers can experience depression, hypervigilance, insomnia, emotional numbing, recurring nightmares and intrusive thoughts. And in many cases, the symptoms worsen with time, leaving the victims at higher risk for alcohol and drug abuse, unemployment, homelessness and suicide. Sometimes families can become collateral damage. Christine Hansen, executive director of the Miles Foundation, which runs a hot line for domestic-violence victims in the military, says that since start of the Iraq war, calls have jumped from 50 to more than 500 a month.

Without treatment, some conditions such as chronic PTSD can be lethal. Five years after the Vietnam War, epidemiologists studying combat veterans found that they were nearly twice as likely to die from motor-vehicle accidents and accidental poisoning than veterans who didn't see combat. In a 30-year follow up, published in the Archives of Internal Medicine this year, the same combat vets continued to die at greater rates and remained especially vulnerable to drug overdose and accidental poisoning. "We had the John Wayne syndrome," says Vietnam veteran Greg Helle, who grappled with severe PTSD for decades. "We were men, we'd been to war. We thought we could tough it out." Doctors hadn't developed effective treatment for PTSD and besides, says Helle, seeking help was an admission of weakness.

Doctors now know that PTSD is the product of subtle biological changes that occur in the brain in response to extreme stress. Using sophisticated imaging techniques, researchers now believe that extreme stress alters the way memory is stored. During a major upheaval, the body releases massive doses of adrenaline which speeds up the heart, quickens the reflexes and, over several hours, burns vivid memories that are capable of activating the amygdala, or fear center, in the brain. People can get PTSD, doctors say, when that mechanism works too well. Instead of creating protective memories (ducking at the sound of gunfire), says Dr. Roger Pitman, a psychiatry professor at Harvard Medical School, "the rush of adrenaline creates memories that intrude

on everyday life and without treatment, can actually hinder survival."

Why some people get PTSD and others don't remains a mystery. Recent studies suggest that a predisposition to the disorder may be genetic and that previous traumatic experiences can make soldiers more vulnerable to it. Once a soldier has it, though, says Dr. Matthew Friedman, executive director of the Department of Veterans Affairs National Center for PTSD, the good news is that the medical community now knows that "PTSD is very real and very treatable."

The challenge, says Friedman, is getting help—counseling or drug treatment—to veterans who need it most. As the Iraq war continues, officials at the Department of Defense and the VA are scrambling. After a

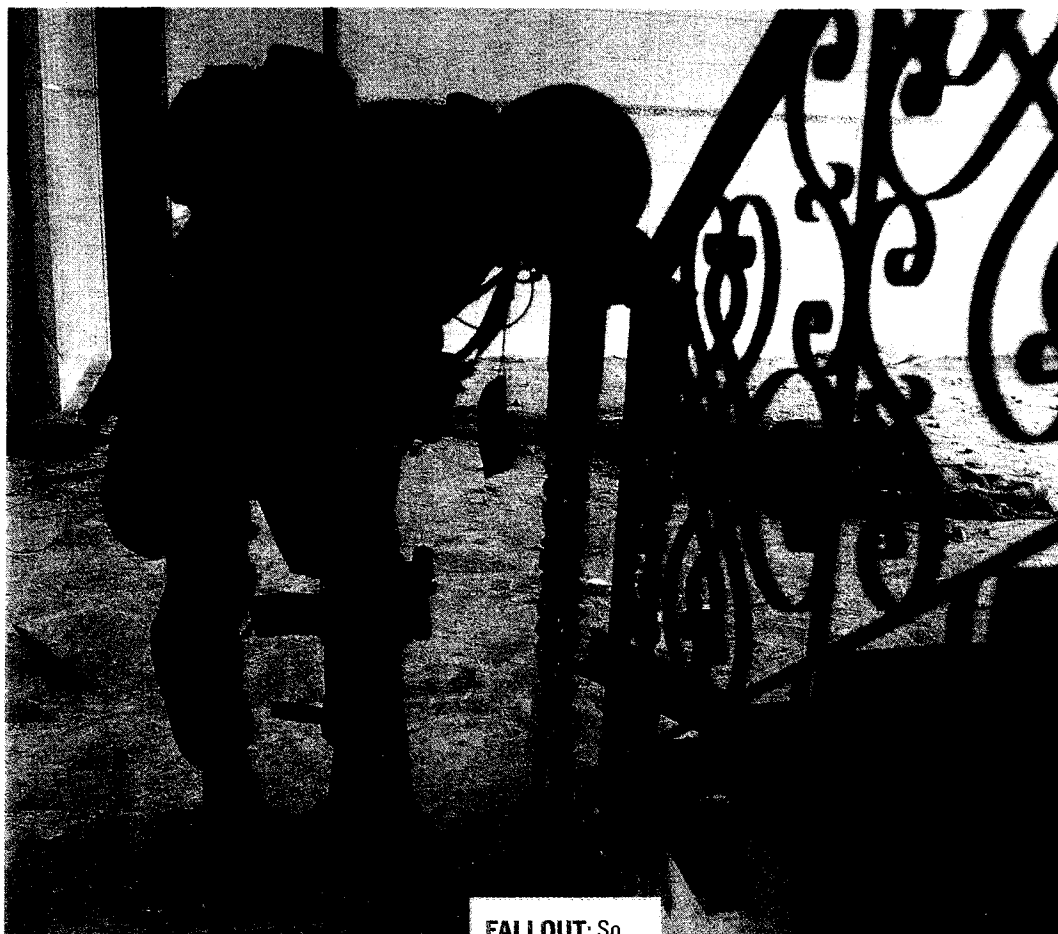
The conflict in Iraq, with its intense street fighting, is especially stressful.

FALLOUT: So far, 17 percent of vets returning from Iraq report mental disorders

rash of suicides among soldiers, they've increased the number of psychiatrists and psychologists in combat areas. Social workers trained to spot PTSD and other

mental disorders are assigned to military hospitals around the country. Primary-care physicians at VA clinics and hospitals are now able to access combat records to see if their patients might be at risk for PTSD. Doctors are issued wallet-size reminders on how to spot PTSD and refer patients for further treatment. The VA has recently hired about 50 veterans from Iraq and Afghanistan to do outreach in the Vet Centers, a system of 206 community-based mental-health clinics around the country. But their resources are limited: Congress has set aside an additional \$5 million a year for three years to deal with the new mental-health problem.

VA officials admit they're not catching everyone who needs help. National Guard members often do many tours and can be exposed to more combat than regular soldiers. But instead of rotating back to military bases where they can be monitored, they often return to their hometowns where readjustment problems can become a family crisis. If they begin to ex-



hibit signs of PTSD or other psychological problems, they need to get help quickly. The VA will provide mental-health benefits for them for only two years following their service. Regular soldiers get mental-health benefits indefinitely.

Help came too late for Marine reservist Jeffrey Lucey. In July 2003, he returned home to Belchertown, Mass., from Iraq and gradually sank into a deep depression. His family looked on in anguish as he began drinking too much and isolating himself from their close-knit clan. By spring of 2004, he'd stopped sleeping, eating and attending college. When his sister Debra Lucey tried to have a heart-to-heart, "he'd

Trauma can cause big changes in the way the brain stores memories.

describe the terrible things he'd seen and done," she says, "and he'd always end by saying 'You'll never be able to understand.'" Frantic, family members had him committed to a psychiatric hospital but he was soon released. A few weeks later he crashed the family car, and the following

month a neighbor found him wandering the streets in the middle of the night dressed in full camouflage with two battle knives he'd been issued in Iraq. Last June, Jeffrey Lucey hanged himself in the basement of his family home.

Shortly before he died, Lucey talked to an Iraq vet turned counselor at his local Vet Center. "He said he'd found someone who could really understand," says Debra. But before he could keep his next appointment, his demons took hold. Now Debra is telling her brother's story in the hope that others find the help they need in time. Psychological problems, she says, are an enemy that no soldier should face alone. ■

Treatment for PTSD

To Heal a Shattered Soul

BY ARIEH Y. SHALEV, M.D.,
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We can count the dead. We can see physical injuries. But in soldiers returning home, it's hard to see the psychological damage among those who have witnessed the blood, heard the screaming, felt the shattering blast and smelled the burning flesh. Unless they make sense of what they saw and felt under fire, they'll continue to relive the experiences of war. Fortunately, the human brain—which evolved in an environment of constant physical threat—is so resilient that horror is usually contained. Most soldiers do not require professional help. But when coping fails, so does recovery.

In the first three months after a trauma, survivors need to be reassured that they will recover. By talking about their memories with family and friends, soldiers can begin to find meaning in their experience. They discover the pride in their sacrifice and they grieve their losses. Talking should be encouraged, but some veterans prefer not to be pushed, and that wish should usually be respected.

Unfortunately the natural healing process sometimes fails. When survivors become depressed, angry, guilt-ridden or emotionally



distant—all possible symptoms of posttraumatic stress disorder—treatment is critical. Drug therapy often includes antidepressants, which can alleviate the core anxiety symptoms of PTSD. Stress can exacerbate almost any mental disorder, so a psychiatrist may also prescribe a mood stabilizer such as lithium or an antipsychotic such as risperidone. Anxiety-muting benzodiazepines

such as lorazepam and clonazepam may actually raise the risk of chronic PTSD if taken continuously.

Talk therapy, especially cognitive behavioral therapy, also has a role. A psychotherapist may cautiously encourage the trauma victim to confront ideas and situations, both real and imagined, that trigger symptoms. Treatment may even include virtual-reality

devices that re-create the experience of combat. Talk therapists often encourage patients to manage their anxiety with relaxation methods, such as meditation or breathing exercises, and with distraction techniques that shift attention away from distressing thoughts. Ultimately the survivor must come to terms with how the trauma has changed his or her self-concept, relationships and aspirations.

We may never be able to expunge memories selectively from consciousness, but some researchers are investigating ways of helping the brain soothe the pain of recollection. Beta blockers, which blunt the adrenaline response to stress, may reduce the intensity of emotions associated with traumatic memories. And a technique called repetitive transcranial magnetic stimulation seems to activate the prefrontal cortex, a brain region believed to be responsible for putting memories in context.

Still, the best treatment is a successful reintegration into civilian life. Storytelling can help turn traumatic alarm signals into tolerable autobiographical memories. And when the dreadful memories are accompanied—as is likely—by memories of loyal friends loved and honorable tasks completed, emotional distress can be transformed into emotional growth.

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